

EXAMINER'S AMENDMENT

An extension of time under 37 CFR 1.136(a) is required in order to make an examiner's amendment which places this application in condition for allowance. During a telephone conversation conducted on 9-14-2009, Ari Zytcer requested an extension of time for 3 MONTH(S) and authorized the Director to charge Deposit Account No. 14-0112 the required fee of \$555 for this extension and authorized the following examiner's amendment. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

1. (Currently Amended) A peri-arterial blood flow booster apparatus, for comprising:

a pressure-applying device comprising:

a restrainer envelope having an upstream end and a downstream end, and an interior surface defining an interior for receiving a blood vessel and a protrusion fixedly disposed on the interior surface; and

~~a~~ ~~at least one~~ balloon disposed in the interior of the restrainer envelope for placing alongside a portion of a ~~the~~ blood vessel, having two or more portions comprising an upstream portion disposed in the restrainer envelope interior extending from said protrusion towards of the upstream end of the ~~restrainer envelope~~ and a downstream portion disposed in the interior extending from said protrusion towards of the downstream end of the ~~restrainer envelope~~ downstream of the upstream portion placed alongside a portion of the blood vessel, and

~~a protrusion fixedly disposed on the interior surface of the restrainer envelope at the upstream end, and in communication with the upstream portion of the at least one balloon when the upstream portion is inflated; and~~

a control console comprising
an inflating unit for rapidly inflating and deflating the ~~at least one~~ balloon, the inflating unit being connected to the ~~at least one~~ balloon,
sensing means for sensing electrocardiograph signals of a the patient, and
a control unit for controlling the inflating unit in correlation with the electrocardiograph signals detected by the sensing means;

wherein the ~~peri-arterial blood flow booster apparatus is configured sufficient such that upon actuation, inflation of the upstream portion of the downstream portion of the at least one balloon extends further downstream from the protrusion than the upstream portion extends upstream from the protrusion occurs prior to inflation of the downstream portion thereby preventing such that upon inflation of the upstream portion blood backflow is prevented~~, and upon inflation of the downstream portion blood is forced to flow downstream.

2. (Currently Amended) The apparatus of claim 1, wherein the restrainer envelope is a sleeve.

3. (Cancelled)

4. (Currently Amended) The apparatus of claim 1, wherein the protrusion is an annular protrusion.

5. (Cancelled)

6. (Cancelled)

7. (Currently Amended) The apparatus of claim 1, wherein the sensing means further comprises means~~_provided~~ for sensing blood pressure.

8. (Previously presented) The apparatus of claim 1, wherein the control console is implantable within the patient's body.

9. (Currently Amended) The apparatus of claim 1, wherein the control console is configured sufficiently small in size so as to be portable.

10. (Currently Amended) The apparatus of claim 9, wherein the control console is configured sufficient to be attached to a belt to be worn by a patient.

11. (Currently Amended) The apparatus of claim 1, further comprising provided with a sheath provided over the at least one balloon.

12. (Currently Amended) A method for improving blood flow and pressure through an occluded blood vessel of a patient, comprising:

providing a pressure-applying device comprising

a restrainer envelope having an upstream end and a downstream end, and an interior surface defining an interior for receiving a blood vessel and a protrusion fixedly disposed on the interior surface;

a at least one balloon disposed in the interior of the restrainer envelope for placing alongside a portion of a the blood vessel, having two or more portions comprising an upstream portion disposed in the restrainer envelope interior and extending from said protrusion towards of the upstream end of the restrainer envelope and a downstream portion disposed in the restrainer envelope interior extending from said protrusion towards of the downstream end of the restrainer envelope downstream of the upstream portion placed alongside a portion of the blood vessel,

wherein the downstream portion of the balloon extends further downstream from the protrusion than the upstream portion extends upstream of the protrusion such that upon inflation of the upstream portion, blood backflow is prevented, and upon inflation of the downstream portion blood is forced to flow downstream, and

~~a protrusion fixedly disposed on the interior surface of the restrainer envelope at the upstream end, and in communication with the upstream portion of the at least one balloon when the upstream portion is inflated;~~

affixing the pressure-applying device to a portion of a peripheral blood vessel of the patient;

providing a control console comprising

an inflating unit for rapidly inflating and deflating the at least one balloon, the inflating unit being connected to the balloon,

sensing means for sensing electrocardiograph signals of a the patient, and a control unit for controlling the inflating unit in correlation with the electrocardiograph signals detected by the sensing means;

sensing the electrocardiograph signals of the patient;

and inflating and deflating said at least one balloon at a predetermined rate, in correlation with the electrocardiograph signals, ~~such that inflation of the upstream portion of the at least one balloon occurs prior to inflation of the downstream portion thereby preventing blood backflow, and inflation of the downstream portion forces blood to flow downstream.~~

13. (Currently Amended) The method of claim 12, wherein the restrainer envelope is a sleeve.

14. (Cancelled)

15. (Currently Amended) The method of claim 12, wherein the protrusion is an annular protrusion.

16 -17. (Cancelled)

18. (Currently Amended) The method of claim 12, wherein the sensing means further comprises means for sensing blood pressure.

19. (Original) The method of claim 12, further comprising implanting the control console within the patient's body.

20. (Currently Amended) The method of claim 12, wherein the control console is configured sufficiently small in size so as to be portable.

21. (Currently amended) The method of claim 20, wherein the control console is configured sufficient to be attached to a belt to be worn by the patient.

22. (Original) The method of claim 12, wherein the blood vessel is an artery.

23. (Original) The method of claim 22, wherein the artery is an iliac artery.

24. (Original) The method of claim 23, wherein both of the patient's iliac arteries are treated.

25. (Original) The method of claim 22, wherein the artery is in the descending aorta in the chest of the patient.

26. (Currently Amended) The method of claim 12 [22], further comprising providing a sheath covering the at least one balloon, the said sheath being placed between the blood vessel and the at least one balloon ~~to secure the balloon in place and provide an efficient facilitator for balloon replacement.~~

27-52. (Cancelled)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark W. Bockelman whose telephone number is (571) 272-4941. The examiner can normally be reached on Monday - Friday 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl Layno can be reached on (571) 272 -4949. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark W Bockelman/
Primary Examiner, Art Unit 3766